Spring 2007

SKYWATCH
Spotter Newsletter

Wind Storm Damages Area

by George Perry, Journeyman Meteorologist

On December 14th and 15th, 2006, the strongest wind storm since 1995 moved across the Pacific Northwest and caused widespread damage and power outages throughout Northeast Oregon and Southeast Washington. Fourteen people died in storm related incidents (all on the west side of the Cascades) and almost 1 million customers in Washington and 400,000 customers in Oregon lost power for some time. Some customers were without power for up to a week. Winds reached as high as 113 mph along the Oregon coast at Mount Hebo and 105 mph in the Cascade Mountains near White Pass.

Photo Courtesy of Tony Ahern, Madras Pioneer

The storm developed rapidly on December 13th as a low formed over the Pacific Ocean several hundred miles off the Northern California coast. The storm tracked ENE toward the Oregon coast and steadily intensified. By Thursday morning, it approached the Oregon coast and turned northward, dragging a warm front across the area from south to north. Many locations in Southeast Washington and Northeast Oregon had rainfall of over half an inch with this front, and up to 7 inches of snow fell in the east slopes of the Washington Cascades. As it approached the Washington Coast on Thursday afternoon, the storm reached its peak strength of 970 mb

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(26.84"). The storm had developed into its fully mature stage with an intense pressure gradient field and was being fed by a 210 mph jet stream aloft. With the storm tracking along the coastline, this put Oregon and Washington in the southeastern quadrant of the storm which is generally the strongest area of most storms. As the Low tracked into southern British Columbia, a cold front dragged through Oregon and Washington and this front produced the strongest winds from the storm.

Shortly before 8 PM, reports of winds in excess of 60 mph were reported in numerous locations in central Oregon with the highest being a 78 mph gust 11 miles east of Shaniko. Emergency managers in Deschutes County reported trees fallen on 4 houses in La Pine and 1 house in Sisters. One person was injured in La Pine. Many trees and power lines were down throughout that area. By 10 PM, winds in excess of 60 mph were being reported across the Columbia Basin and trees were being blown down on to several highways and onto houses in The Dalles, Toppenish, Wapato, Yakima, Pendleton and Hermiston. By Midnight, strong winds had moved into Wallowa County and a 78 mph wind gust was reported near Enterprise. By this point, winds began to slowly subside in Central Oregon and during the course of the night, winds began diminishing from south to north.

In its wake, the windstorm of December 14th-15th, 2006 left dozens of homes damaged, widespread power outages and at least 4 highways blocked by fallen trees. Fortunately, no deaths were reported on the east side of the Cascades and only a few injuries. It will be remembered as the major weather event of 2006.

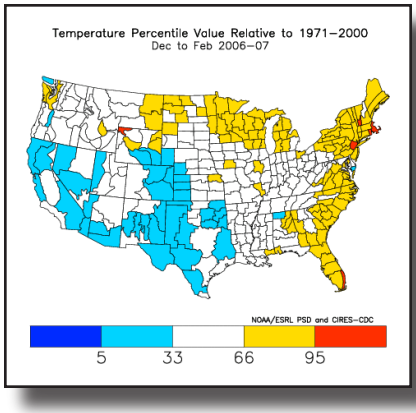
Highest Winds in the Pendleton Forecast Area from the December 14th – 15th Windstorm

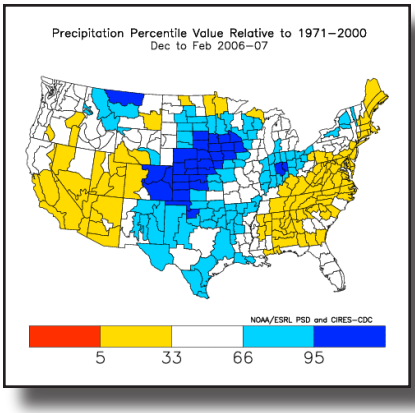
White Pass Ski Area, WA	105 mph	North Pole Ridge RAWS (11 E Shaniko, OR)	78 mph
Enterprise, OR	76 mph	John Day, OR	74 mph
Hermiston, OR	69 mph	6 SW Culver, OR	69 mph
4 NE Sisters, OR	66 mph	2 NE Warm Springs, OR	65 mph
Board Hollow RAWS (Jefferson County, OR)	65 mph	Condon, OR	64 mph
Dallesport, WA	63 mph	11 NNE Pasco, WA	62 mph

Spring Climate Outlook

by Jon Mittelstadt, Science & Operations Officer

Last summer, the NOAA/NWS Climate Prediction Center climate outlook for December-January-February 2006/2007 (DJF) called for a tilting of the odds towards a warmer-than-normal temperature average, and towards normal-to-below-normal precipitation totals across eastern Oregon and Washington. How did the 3-month DJF period turn out? The left-hand-side figure below shows that the DJF averaged temperature in eastern Oregon and Washington was in the near normal category (white shading), i.e., it belongs in the middle 3rd of the set of 1971-2000 values. The right-hand-side figure shows that DJF precipitation totals placed mostly in the middle third of the 1971-2000 values, except for extreme eastern Oregon and part of extreme southern Oregon which placed in the bottom third (yellow shading).





This past winter was a weak-to-moderate El Nino winter. However, the typical El Nino impacts did not occur for the U.S. For example, southern California is typically wetter than normal during an El Nino winter, but the figure above shows their DJF precipitation total placed in the lower third compared to 1971-2000 values. Despite warm sea-surface temperatures in the equatorial Pacific region (the typical El Nino signature), there was never a link to the storm track across the Pacific Ocean and as a result the typical U.S. impacts did not occur.

Spring 2007 Outlook

The CPC expects neutral ENSO conditions (between an El Nino and La Nina) for March and April, followed by a transition to La Nina conditions in May. Their outlook for March-April-May 2007 for eastern Oregon and Washington calls for a tilting of the odds towards above normal temperature, and for near normal precipitation.

Spring Spotter Highlight

by John & Sharon Carlson, Kittitas-4H (or should it be KI-504?)

Sharon and I were turned on to becoming weather spotters by another weather spotter. We were told there were geographic gaps in the information resources available to the National Weather Service. We learned we could be useful by providing our observations because we would help fill in one of those gaps in coverage. We live in the heart of the Cascades, along the I-90 corridor midway between Seattle and Ellensburg near Easton on Lake Kachess.

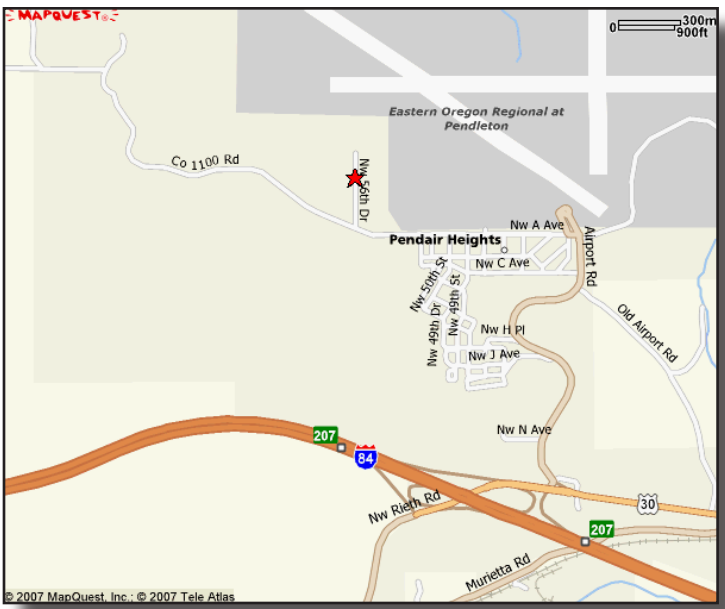
Weather is very important to us as it impacts just about every activity in our lives. Accurate weather forecasts matter a lot to us. We are both amateur radio operators, "hams", and use our ham radios to listen to weather broadcast out of the Cle Elum transmitter, WXM 21, almost every morning. In the winter, Sharon depends on snowfall predictions to commute to her job in North Bend. The predictions in the forecast help her decide whether she can make it back home over Snoqualmie Pass at the end of the day. I use the forecasts to plan when to snow blow the 1/4 mile of roadway to our house. In the summer, I work fighting wildfires and I pay equally close attention to the summer forecasts to track wildfire conditions. We both volunteer with Upper Kittitas County volunteer fire districts for structure fire fighting and go on EMS calls as EMT's with those fire districts. We also volunteer with Kittitas County Search and Rescue as EMT's, volunteer responders, as trainers for avalanche awareness training and avalanche rescue operations and as instructors for First Aid and CPR. Since some of our EMS calls to the I-90 corridor are weather related, we appreciate the warning we get for severe conditions so we can gear up mentally to respond.

In her spare time, Sharon loves the outdoors and enjoys the freedom of the hills year round with backpacking activities. Sharon also staffs a runner aid station on Thorp Mountain during the annual 100 mile run, the Cascade Crest Classic Run. The forecasts we get from the National Weather Service are important for planning our outdoor activities.

We enjoy being a part of the grassroots layer of the National Weather Service. Likewise we are also gratified when we can pass on information to the National Weather Service in the interests of public safety. When we get freezing rain or heavy snowfall we like being able to call your office to pass on the information.

NOAA Plans Open House To Celebrate 200 Years

You are invited to join us as we celebrate NOAA 200 with an Open House on May 19 from 10 a.m. to 3 p.m at the National Weather Service in Pendleton. We are located at 2001 NW 56th Drive. Please see map below. Fun activities for all ages are planned. See the present and future technology of weather forecasts and severe weather detection and warnings. There will be rocket and balloon launches throughout the day to measure the wind, temperature, humidity, and pressure in the atmosphere. The National Guard will be displaying tanks and aviation equipment. We won't be lighting 200 candles, but come help us enjoy some cake, refreshments, and some great exhibits and activities. There will even be a spotter class from 3 p.m. to 5 p.m.



The U.S. Geodetic Survey was formed in 1807 and is now a part of the National Oceanic and Atmospheric Administration. NOAA also includes the National Weather Service, NOAA Fisheries, National Ocean Services, Satellite and Information Service, Climate Program Office, and Oceanic and Atmospheric Research.

Climate In Review

New Feature on NWS Pendleton Homepage

Are you wondering if we were above or below average in temperature last month? Do you want to read about last month's significant weather? Then you are in luck! Located on the National Weather Service Pendleton homepage, down on the left-hand side under "Climate" and "Local" you will find a new study called Month In Review. This review is written for the previous month and is posted within the first two weeks of each month.

Sections will highlight;

(1) information on average monthly temperatures and precipitation for selected area cities,

(2) selected temperature and precipitation records, and

(3) significant weather that occurred over the month.

You will also be able to view earlier months going back to January 2007. In the local climate webpage, just click on the tab that says "Local Data/ Records" and you will see a link for "Month In Review".

Spotter Training Pre-Registration Available

In order to make spotter registration easier, spotters now have a choice of going to the internet or using the form in the newsletter.

On the internet, please go to weather.gov/Pendleton and follow the link on the home page for more info. You can then email the info to the National Weather Service or print it and bring to the class. Be sure to enter your correct latitude and longitude in degrees (and decimal) and your elevation. Topozone.com provides maps for determining latitude, longitude, and elevation.

If you are unable to use the internet form, you can fill out the information in the newsletter form and bring it to the class or register at the class.

Spotter training begins in Dayton, Washington on April 3 and ends in Madras, Oregon on June 6. See the full schedule on the back of the spotter registration form.

To get all the latest weather information, see
The National Weather Service on the web at
weather.gov/pendleton

SKYWARN Coordination Meeting

by Alan Polan, KE4TRR, Journeyman Forecaster

A coordination and planning meeting for SKYWARN Amateur Radio Nets will be held at the Pendleton Weather Forecast Office (WFO) on Saturday, May 19, 2007 at 3:00 PM PDT. The meeting will start immediately after our Open House on May 19.

The meeting will enable amateur radio operators and the Pendleton WFO to coordinate and plan for a proposed SKYWARN Net on the HF Amateur Radio bands in our County Warning Area (CWA). We will have a round table session for hams to float suggestions and ideas that can be incorporated into standard operating procedures for activating a SKYWARN Net on an appropriate Amateur Radio HF band during severe weather.

All SKYWARN Net Coordinators and SKYWARN Net Control Operators are invited to attend the meeting. All other interested hams are also welcome to attend the meeting.

We want hams to operate our new SKYWARN HF Amateur Radio Station during widespread outbreaks of severe weather to assist with the collection of weather reports.

A SKYWARN HF Net would not replace or supplant the "sectored" county/regional SKYWARN VHF Amateur Radio Nets on the 2-meter band that are currently organized in our CWA. Rather, a SKYWARN HF Net could also be activated when a local SKYWARN VHF Net is activated. The SKYWARN HF Net could provide an HF channel for a SKYWARN VHF Net to communicate with the Pendleton WFO, and in particular could be used to relay weather reports to the Pendleton WFO. It could also afford hams who have an HF station, but cannot participate in a SKYWARN VHF Net, a radio channel for reporting severe weather to the Pendleton WFO. In essence, a SKYWARN HF Net will provide another way for hams to transmit reports of severe weather to the Pendleton WFO independent of landline communications.

SKYWARN VHF Nets can work with the SKYWARN HF Net to circumvent bottlenecks in our landlines and thus get a severe weather report to the Pendleton WFO as soon as possible so that our warning forecasters can stay abreast of the situation and get a timely warning out to the public.

Precipitation Summary, So Far

by Marilyn Lohmann, Service Hydrologist

The water year started off quite dry with amounts during the month of October only 30 to 60 percent of normal. November and December were quite stormy with many locations seeing amounts 120 to 150 percent of normal. January 2007 was quite dry, while in February, it remained fairly dry in Central Oregon with normal to slightly above normal precipitation across the rest of the region.

Stations	Oct 2006 - Feb 2007 Precipitation	Percent of Normal
Bend	6.30	93%
Condon	9.02	119%
Dayville	5.31	120%
Dufur	9.76	116%
John Day City	5.39	96%
Joseph	5.52	88%
La Grande	7.86	91%
Madras 2 N	4.61	70%
Meacham	21.02	87%
Milton Freewater	7.85	97%
Mitchell 2 NE	6.36	144%
Pendleton Airport	6.37	94%
Pilot Rock	6.61	100%
Prineville	4.80	89%
Seneca	5.36	84%
Union Exp Sta	3.89	66%
Wallowa	8.07	94%
Wickiup Dam	13.64	97%
Ellensburg	7.65	142%
Hanford	3.54	87%
Ice Harbor Dam	5.30	87%
Mount Adams RS	40.32	130%
Prosser	5.13	113%
Sunnyside	4.36	105%
Whitman Mission	7.63	101%
Yakima Airport	5.11	104%

E-Spotter Is Here!

You can now go online and send your spotter reports directly to us in real time. In the past you were able to send us an email with your report but it may have been days before anyone saw it. With E-Spotter we will get your report as soon as you send it. We will then be able to use the report in our local storm report. To sign up for E-Spotter, go to espotter.weather.gov and register by following the instructions. Don't forget to use Pendleton, OR as your local Weather Forecast Office.

Check Your Spotter Number!

Your spotter number may have changed! This mainly affects Ham Radio Operators and Lookout Tower Spotters. We needed to do this to alleviate some confusion as to who is actually calling us. For example you could be calling from county XX as Spotter #1. On our end that would be Spotter XX-1 but is it XX-1, XX-1H or XX-1T? We may not know. This will also let us immediately know if you are a radio operator or not.

Check your spotter number on the label of this newsletter.

"Weather Words"

Word Search Puzzle

See if you can find all of the hidden words in the letters below. Words can be arranged left, right, up, down or diagonally. Answer key is on page 11.

L I O O G T I B P H O M A L L B F S U N N Y R P N
R W E I B N C N Y D R W H G N Q X X J Y T I M L O
E Q I P D O I C A O C U T N A C I F I N G I S N T
T M C N U A N N T V E R I F I C A T I O N D S R E
T H U N D E R S T O R M N O I T A N I D R O O C L
O R T H G O A M P H C T A W Y K S R E G A N A M D
P Y A R T H H W A R G M C W A T C H E S O O K I N
S I E D A M A G E H I I C O M M U N I T Y A O Q E
L M T R A I N I N G Y N L Q B S G N I N R A W A P
E K U K W O K O T B Q T G O M X S Y T E F A S V S

COMMUNITY, COORDINATION, COUNTY, DAMAGE, EMERGENCY, HAIL, HAMRADIO, LIGHTNING, MANAGER, NOAA, PENDLETON, SAFETY, SIGNIFICANT, SKYWATCH, SPOTTER, SPRING, STORM, SUNNY, THUNDERSTORM, TORNADO, TRAINING, VERIFICATION, WARNINGS, WATCHES, WIND

Staff Spotlight

by Mike Vescio, Meteorologist-in-Charge

I knew at a very early age that I wanted to be a meteorologist, which is common for people in this profession. When I was six, a tornado hit the town where I was living in upstate New York and did a lot of damage at the golf course and country club. The trees that were snapped and uprooted left quite an impression on me. Looking back, the tornado was probably only an F1 or F2 but to me it was quite impressive! From that point forward I was very interested in weather. While I was growing up I kept detailed weather observations and if I dug through my attic I could probably still find them. We moved to Fulton, New York when I was seven, which is where my mom and dad grew up, and I was introduced to a new weather Phenomenon: lake-effect Snow! Being downwind of Lake Ontario resulted in some wild winters, and several feet of snow in one day was not an uncommon occurrence. You may have heard the national news recently about my home county, Oswego County, receiving 9 feet of snow in just a few days time. Snow removal in Fulton was amazingly good, and it was common for schools to be open even after 1-2 foot overnight snowfalls. Although I find Lake effect snow to be very interesting, my true passion in meteorology is severe thunderstorms and tornadoes. My dream job has always been to be a Storm Prediction Center (SPC) Lead Forecaster and get to issue the severe thunderstorm and tornado watches for the entire lower 48 states. That dream became a reality in 1995 when I was hired as an SPC Lead. I worked in that position for 5 years and it was very rewarding. The most challenging day that I worked at SPC was the evening of May 3rd, 1999. On that day, a large tornado outbreak occurred across Oklahoma and Southern Kansas. An F5 tornado struck Moore, Oklahoma just a few miles from my house and the

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SPC facility in Norman. It was difficult to continue to do your job while a monster tornado was bearing down on your location. Over 40 people were killed that evening and the tornado that hit Moore had the highest winds ever recorded on earth at over 300 mph!

In late 2000, I decided that it was time to pursue other challenges in my career. One of my goals was to become a Meteorologist-in-Charge at a forecast office. As an interim step, I took a position as the Science and Operations Officer at the National Weather Service in Fort Worth, Texas. There were many thrilling afternoons and evenings during the spring with supercell thunderstorms roaming across north central Texas. In early 2003, I was selected for the Meteorologist-in-Charge position at WFO Pendleton. I never imagined that I would end up out west and neither could a lot of my friends who said I would miss the severe weather, but I must say it has been a wonderful move for me. The staff here is extremely dedicated to providing the best possible service to our customers, and there is no shortage of weather challenges. Although the frequency of severe thunderstorms is less than in the plains states, we do get our share. Plus we have fire weather and winter weather to deal with, not to mention high winds, blowing dust, fog, and complex terrain! Throughout my career I have been stationed in South Carolina, North Carolina, Missouri, Oklahoma, Texas, and now Oregon. This area is by far the most difficult to forecast for mainly due to the great variability in the terrain. So it is fun to be in charge of an office that has a difficult task to do each and every day. I look forward to serving you our valued customers and partners for many years to come.

Answer key for word search on page 9.

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+ + O + G + + + + + O M + + + + + S U N N Y + + N
R W + I + N C + Y D R + + + + + + + + + + + + + O
E + I + D O I C A O + + T N A C I F I N G I S + T
T + + N U A N N T V E R I F I C A T I O N + + + E
T H U N D E R S T O R M N O I T A N I D R O O C L
O + T H G O + M P H C T A W Y K S R E G A N A M D
P Y A R T + + + A R G + + W A T C H E S + O + + N
S I E D A M A G E H I I C O M M U N I T Y A + + E
L M T R A I N I N G + N L + + S G N I N R A W + P
E + + + + + + + + + + + G + + + + Y T E F A S + +
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